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June 22-23, 1991

JUNE 1991

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FIRST CLASS MAIL



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* Denotes first year of a two year term.

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The Pikes Peak Radio Amateur Association meets on the second Wednesday of each month at the Elks Lodge, 3400 North Nevada Ave. at 7 PM.

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Message from the President...

Well, you might have noticed that this issue of Ø-BEAT is a little more sparse than usual... Why? Because Ron has received so little input from PPRAA members. Remember, this is your newsletter and it needs your input.

The club's annual swapfest is now history for this year, and I heard mixed reports. Some said they didn't like the multiple room new layout; but I think more said they did, primarily because there was more room to get around. Some vendors I talked with were disappointed at their sales; but I think more were pleased (I think it depends on what's being sold!). Well, there's good news and bad news about the layout—The good news is that we had it this year; the bad news is that we can't guarantee the same next year unless we change locations again. It was only because of suites at the mall being unoccupied at the time that it worked out the way it did.

The fact that this swapfest was such a success was due to the efforts of a number of people all of whom I'd like to thank:

- The management at the Shops at the Bluffs, particularly Michelle Carvelle, who provided the space free of charge and went out of their way to help accommodate our needs.
- Jeff NØJLH, our swapfest Chairman, who saw to it that all (Well, almost all!) of the little details were taken care of. A tough job well done!
- Ron NKØP who brought his prior experience to bear, giving lots of advice as well as handling the ticket production and distribution. In the process, he even became the club's raffle "expert" licensed by the State of Colorado!

- Rosie WAØMNL and Russ KBØFNM who did a lot of the general running around, acquired the door prizes (many donated), and sold and/or distributed a large number of the tickets.
- Al NØCMW and his wife Frances NØIUT who handled all the table arrangements including sales, layout, and the rentals. Another far-from-trivial job.
- Mary Chatelain, XYL of Don KEØWC who donated her time both to crochet the beautiful "Desert Storm" afghan and to sell the tickets for that raffle.
- Chris NXØE, Bill K4YCD, and all the others who somehow managed to handle one of the biggest VE sessions in the club's history.
- Also all the members who showed up on the evening before to help with the table setup. Though I must say I was disappointed in the turnout at the end of the swapfest where it was left to about a half-dozen people to take down all the tables and get them out to the van.

I'm sure I missed some others—please forgive me but accept my thanks anyway.

Don't forget that this month's program is a Field Day update by Mike KØTER followed by the mini-auction. Will (NØHRD) said he plans on being there so it should be a fun time again...

I'll look forward to seeing you all on Wednesday.

73, Dave, NØION

PPRAA GENERAL MEETING MINUTES

MAY 8, 1991

The meeting was called to order at 7:00 pm by Dave - NØION. Seventy members and guests were present. After introductions, the minutes of the previous meeting were altered to correct a misprint in the board meeting date. The minutes were then approved.

Rosie - WAØMNL presented the Treasurer's report. Income totaled \$195 and expenses equaled \$351.06 leaving a balance of \$1324.50.

Ron - NKØP noted a misprint in a Ø-BEAT ad. He also reminded attendees of the Denver Swapfest scheduled for July 14. Again, articles are always welcome from the readership of Ø-BEAT.

For the Publicity report, Al - N2IWZ noted that Drew Wilson from the Gazette met with club members and an article was scheduled to appear in an upcoming edition of the Gazette. (The article appeared in May). Al would appreciate a copy from any members who might have clipped the article. Al also had a call from a lady who had a son wanting to be a ham. Several members volunteered, at the meeting, to contact the lady.

In ARES notes, John - NØKIC reminded members that there will be a table at the Swapfest. Harv - WB6YXD recognized Don, Ron, and Al for their help at the March of Dimes Walk. George - WBØDUM announced that we would be involved in the Volksmarch on May 25th. Additionally, there is a Bikeathon (July 6 & 7) that can use volunteers. Contact John for details. Helpers are also needed for the Pikes Peak Hill Climb -- contact Ron for information (since his number is unpublished, please contact the club secretary first).

Steve - WB7VHR gave a SKYWARN report consisting mainly of caveats to those volunteers and recommendations on safety precautions. Much of the information was printed in the last issue of Ø-BEAT.

In other business: Lucy wants some help with the meal preparations for Field Day; VE testing will be held at the Swapfest; May 9th is the last Technician class night -- there were 6 perfect scores on the Novice test and 3 missed only 1 question -- 9 passed the code test and 1 obtained the Advanced license. Jeff reported that plans for the Swapfest were in place and all was a "go".

In new business, Dave read a letter from a soldier in Saudi Arabia. He apparently had been receiving

Ø-BEAT from his wife and wrote to thank the club for its support.

Ron announced a recipient of the ARRL Elmer Award. Al - NØCMW received the award for his efforts in helping another ham recently. The club expressed its good wishes and congratulations to Al.

After the break, the raffle resulted in the following winners:

heat sink	WR2F Larry
QST	NØNJW Phil
CQ	NØLTV Mike
Windshield notepad	WBØDUM George
Coax seal	WA2OOD Greg
Calculator	KØNC Les
Repeater directory	WØULE Glen
OEM gift certificate	NØKIC John

Following the program, Mike - NØLTV presented an interesting and animated talk on digital signal processing.

The meeting adjourned at 8:55 pm. The next meeting will be on June 12 and will cover Field Day preparations and also include another Auction.

Respectfully submitted, Mark - NØEPF

PPRAA BOARD MINUTES

May 14, 1991

The board meeting was held at Al's (NØCMW) and was called to order at 7:10 pm. Present were Al, Russ - KBØFNM, Rosie - WAØMNL, Jeff - NØJLH, Renay - KAØROY, Cassie, Harv - WB6YXD, Mark - NØEPF, Al - N2IWZ, Lauren - KXØO, and Ron - NKØP.

Al spoke again on his meeting with Drew Wilson of the Gazette.

Minor detail concerning the Swapfest were discussed. A MOTION was made and PASSED to rent several fire extinguishers to meet fire regulations. Al passed around a schematic of the table arrangement.

In Field Day matters, the picnic area we wanted is not available but there is an alternate on the hill behind the chapel which is being considered.

Programs: June = Field Day and an Auction
July = Oak - KØROL Amateur TV
The next meeting will be June 18th at Harv's.
Respectfully submitted, Mark - NØEPF

How To Work A VHF Contest
Bob Witte, KBØCY

Almost everyone who has a 2 meter rig has at some time said "I wonder how far will my signal go?" or "I hear you on the repeater, I wonder if we can work simplex?" or "Gee, I can hit the repeater from this location with only 100 mW." VHF propagation, normally line-of-sight, is fun to experiment with.

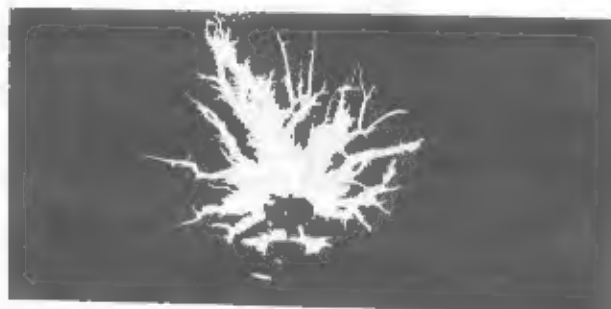
An excellent opportunity to play with VHF radios is a VHF Contest. This year the warm weather VHF contests will be held the weekend of June 9th and September 15th. The contests will start on Saturday noon (Colorado time) and end on Sunday at 9 PM. The object of the contest is to work as many stations as you can on 6 Meters, 2 Meters, 220 MHz, 440 MHz and on up. The number of QSOs is multiplied by the number of different GRID SQUARES that you work. (A more detailed description of the rules will appear in QST the month before the contest.) The entire world is divided up into 2 deg X 1 deg grid squares and the contest exchange is the grid square you are located in.

It can be somewhat of a chore to figure out your grid square, so here is a simplified guide to grid squares in Colorado. If you are near a grid square boundary, you will need to get out a topo map and verify it to be sure. Grid Square DN70 covers Fort Collins, Loveland, Longmont, Greeley, etc. extending north to the state line (41 deg N), east to 10 miles west of Fort Morgan (104 deg W), south to the middle of Boulder (40 deg N) and west to 5 miles west of Cameron Pass (106 deg W). DM79 covers greater Denver, extending north to the middle of Boulder, east to 15 miles west of Limon (104 deg W), south to 5 miles south of Monument (39 deg N) and west to Fairplay (106 deg W). Grid Square DM78 covers Colorado Springs and Pueblo, extending north to 5 miles south of Monument, east to (104 deg W) Fowler, south to 20 miles south of Pueblo (38 deg N) and west to Salida (106 deg W). DN80 is northeast Colorado, including Fort Morgan and Sterling. DM89 is east of DM79, including Limon and Burlington. DM88 is east of DM78 and includes Lamar. Cheyenne, Wyoming is in DN71.

Most serious VHF contesters will be on the SSB portion of the bands. SSB calling frequencies are 50.125, 144.2, 220.1 and 432.1 MHz. FM contest activity has been somewhat limited but most contesters switch over to the standard FM simplex frequencies at some point to check for activity there. Use of the National 2M Calling Frequency 146.52 is NOT ALLOWED for VHF contests. Repeater contacts and contacts on the standard repeater frequencies are also not allowed. So if you are operating FM, try calling on 146.55 MHz.

So what should you do for the contest? If you are highly motivated, get a SSB VHF station with high gain antennas together and go find a hilltop to operate from. (With a small beam and 10 watts on 2M sideband, I have worked stations in Wyoming, Kansas and New Mexico from a Colorado mountain top.) Hilltopping up in the mountains is a great excuse to get out and enjoy the Colorado outdoors. Operating from home is great, too. Or maybe just mobiling around town you can switch over to 2M simplex and see who is around. Contests on the HF bands sometimes are not appreciated since they wipe out the whole band. This problem doesn't exist on VHF so don't think of it as a contest, think of it as "VHF activity weekend". Get your radio fired up and find out what kind of distance can be covered on VHF.

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Amateur Radio in Public Service

Al Craig, N2FWZ, Publicity Chairman

Radio amateurs throughout the United States pride themselves in the tremendous amount of public service that they render every month. Southern Colorado amateurs are no exception. The only problem is that often it is just the hams who perform these acts of service that know about them. Certainly the public at large is not well informed about the public service aspect of amateur radio. Likewise the media, both newspaper and TV, are equally in the dark. And the only people who can change this misconception are we radioamateurs. So let's not continue to hide our light under a bushel. If we don't let each other know about these public service acts it's not likely that anyone else will know about them either.

So when any of you report an accident to the authorities, spot a fire, summon help for a stranded motorist or whatever, please give me the details! All the reports that I receive will be summarized in this column monthly so that we can all know about them.

You don't have to write anything, just telephone me at 594-9288 and tell me about it. I'll do the writing. I have an answering machine running 24 hours a day so if I'm not available just leave your name, call sign and phone number and I'll get back to you. Ofcourse you can leave the details on my machine if you like. It keeps recording as long as you keep talking.

Let's make our good deeds known.

JUNE PPRAA MEETING

The June general meeting of the PPRAA will be held on Wednesday, June 12th at the Elk's Club 3400 North Nevada Ave.

The topic will be "Field Day" followed by a "Mini-Auction"

A truckload of ham gear has been donated to the club and will be sold to the highest bidder!

AMATEUR RADIO CLASSES

The Amateur Radio Classes for this session have ended. Twenty-seven took tests for Novice or higher (15 opted for code) The % passing and upgrading was very high.

The instructor, AD4Z, Al, continued with 5 sessions covering the Tech theory, and attendance was good. Tnx, Al

KB0DUQ, Derrel, and myself offered a little extra code before each session and students continued to come even after they passed the Novice code. The classes consisted of an enthusiastic group.

The Nikola Tesla Museum of Science and Industry hosted the class one evening providing us with a room for class and during the break gave us a tour and demonstration. Everyone thought it was fascinating. TNX.

Also we want to make mention of the Amateurs who attended the sessions for their support among them; KB0FNM, Russ, who served as Custodial Engineer (that means he transported the board and projector) TNX

Rosic, WA0MNL

DITS AND BITS

WANTED: FOR DONATION TO TOM

Large picture frames so he can better display his exclusive news stories. Donations appreciated but will consider small payment. K0TAA, Jess Miley 784-3040.

WARNING TO THIEVES:

You know who you are. Theft or deliberate destruction of any radio transmitting device is a Federal Offense and you can be prosecuted in Federal Court.

FOR SALE:

Electronic Keyer--Heath HD-1410 \$30
Ron NK0P 593-8352

□ Walking Your Tower Up Safely

Have you ever attempted to walk your tilt-over tower or mast up to a vertical position only to discover that about halfway up the tower becomes too heavy to handle? "Yes," you say — heres why.

When you apply force and weight formulae to the job at hand, you will find that the tower "weighs" the most when its at an angle of 45 degrees form the horizontal. This occurs when you are about five feet from the base of your tower and you are "just about there". When the formula is boiled down it looks like this example.

If L = Length of tower (60 feet)

W = Weight of the tower (120 pounds)

H = Height of your shoulder above gnd. (5 feet)

Then L W 60(120)

MAX FORCE = --- = ----- = 360 pounds.

So you pick up the end of your tower thinking, "That's not too heavy" (actually it is 60 pounds), and you head out for the base of the tower, pushing the tower ever upward. At a distance of 30 feet from the base, you have about 115 pounds on your shoulder, (so far so good), and at 20 feet from the base it is now 160 pounds on your shoulder (and the knees start to quiver!). It is about here that you realize that you are in real trouble, and you still have all that weight to carry all the way back to your starting point. But if you are a contender for Olympic weight lifting, you can continue forward: at 20 feet from the base the weight is about 220 pounds; at 10 feet it is about 285 pounds!

Not many of us are going to tackle a 60 foot tower in this manner; but remember, when a rotor, beam and any other hardware items are attached at the top end of any mast or bother, even a short one, the forces required to walk up are considerably greater than a balanced, empty tower. Even the lightest tower can be deceiving because the apparent weight will become many times the actual weight.

[Editor's note: Pushing up with a force of 360 pounds on a tower that weighs 120 pounds means you are pushing up with a force of 240 pounds (360-120) against the hinge. Have a 240 pound man (or woman) hold the base down.]

Avoiding damage to equipment and possibility of personal injury by good planning; use of the equation to calculate the forces necessary to raise your tower; and gather a group of strong friends to help. Have a safe (antenna) party.

Q5 DARC

Committee Chairpersons, etc.

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